

REPORT OF COMPLIANCE MONITORING INSPECTION
at
Acadia Subdivision Plat 2
Northwest of the intersection of Meredith Drive and 160th Street, Urbandale, Iowa, 50322
NPDES Permit Number: (23817-23576)
October 13, 2016

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 7

INTRODUCTION

At the request of the Water, Wetlands, and Pesticides Division, Water Enforcement Branch, I conducted a Construction Stormwater Compliance Evaluation Inspection (CEI) at the Acadia Subdivision Plat 2 (site) in Urbandale, Iowa on October 13, 2016. The inspection was conducted under the authority of Section 308 of the Clean Water Act (CWA), as amended, and in accordance with EPA Region VII Standard Operating Procedures for Compliance Inspections (ENST SOP No. 2332). This narrative report and attachments present the results of the inspection.

PARTICIPANTS

Accurate Land CO, LLC:
Kevin Johnson, President, Site Owner (via telephone)

McAninch Corporation:
Bruce Holtry, Project Foreman

Pezzetti Erosion Control, Inc.:
Jeff Pezzetti, President
Michael Kosloske, Project Manager

U.S. Environmental Protection Agency (EPA):
Erin Trainor, Environmental Engineer

INSPECTION PROCEDURES

I arrived unannounced at the site on October 13, 2016. I met with Mr. Holtry upon arrival. I had a phone conversation with Mr. Johnson, an onsite meeting with Mr. Pezzetti and Mr. Kosloske, a facility walk through, an exit briefing, and an inspection of nexus path to Walnut Creek. I received a follow up letter from Mr. Kosloske via email on October 14, 2016. The Stormwater Pollution Prevention Plan (SWPPP) was reviewed after the inspection on October 18, 2016. I sent a Notice of Potential Violation (NOPV) form to Mr. Johnson on October 19, 2016. I received a response to the NOPV on October 31, 2016.

SITE DESCRIPTION

The site is approximately 63 acres located northwest of the intersection of Meredith Drive and 160th Street in Urbandale, Iowa. Upon completion, 101 single family residential houses will be constructed at the site over the course of 2-3 years. The site is bordered to the north by an unnamed tributary to Walnut Creek, to the east by two residential properties, to the south by Meredith Drive with a residential neighborhood beyond, and to the west by 70th street with agricultural land beyond. The site generally slopes to the north/northeast. An aerial photograph of the site is included in Attachment 2. Pettiecord of Des Moines, Iowa, conducted the initial site clearing on or around April 13, 2016. At the time of my inspection, the facility was cleared and grading and sewer installation (by McAninch Corporation) and paving (by Alliance Construction Group) were occurring. Site stabilization will be completed in approximately four weeks. The weather during the inspection was sunny and approximately 50°F. Normal operating hours at the facility are from 6:30 a.m. - 6:00 p.m., five and a half days per week.

There are six stormwater discharge points and four sediment basins at the site. The sediment basins will remain in place after construction activities are completed. Three of the discharge points are from sediment basins. There was a silt fence around the perimeter of the site.

I arrived onsite at 8:30 a.m. and met with Bruce Holtry, Project Foreman for McAninch Corporation. Mr. Holtry informed me that Kevin Johnson of Accurate Development was the property owner. I called Mr. Johnson and explained I was at the site to conduct a construction stormwater inspection. Mr. Johnson had called Jeff Pezzetti, President of Pezzetti Erosion Control, Inc. to meet me at the site. Mr. Pezzetti and Michael (Mike) Kosloske, Project Manager at Pezzetti Erosion Control, Inc. met me at the site at approximately 10:50 a.m. I showed my credentials to Mr. Pezzetti and Mr. Kosloske.

According to Mr. Kosloske, initial clearing activities began on or around April 13, 2016. Mr. Kosloske provided hardcopies of inspection reports for August 11, 2016, August 25, 2016, September 8, 2016, and October 6, 2016 and emailed the Stormwater Pollution Prevention Plan (SWPPP). Mr. Kosloske, Mr. Pezzetti, and I walked through the site in the same manner that Mr. Kosloske typically conducts his inspections. The site walk through began at the southeast corner of the property and continued around the site in a counter clockwise direction.

I observed sediment on the outside of the silt fence on the southeast corner of the property (photograph 7). There are two sediment basins located on the southeast portion of the site, identified as Basin 6 (photograph 8) and Basin 5B (photograph 9). Basin 6 collects runoff from Goodman Court. The stormwater inlet on Goodman Court did not have inflow protection controls and dirt was observed in the structure (photograph 10). According to Mr. Kosloske, below ground sediment traps (manufactured by WIMCO) are planned to be installed in all the inlet structures once sewer structures are completed. The WIMCO controls will remain in place until final construction is completed. Accumulated sediment on the north side of Basin 6 had been cleared out the week of October 4, 2016, and sediment was stockpiled on the east side of the basin (photograph 12). I did not observe controls around the stockpile (photograph 13). The south side of Basin 6 still contained approximately one foot of accumulated sediment (photograph 14). According to Mr. Kosloske, the stand pipe from Basin 6 had been removed on

October 12, 2016, and will be reinstalled October 14, 2016. The stand pipe was not installed during my inspection (photograph 15). The outfall of Basin 6 (Outfall 6) had approximately 10 feet of rip rap and a series of filter socks and discharged into a grass field (photograph 16). Basin 5B is located to the north of Basin 6 and accumulated sediment had recently been cleared out the week of October 4, 2016. Basin 5B collects runoff from the south end of 161st Court and Oakwood Drive. The stormwater inlets on 161st Court and Oakwood Drive did not have inflow protection controls and sediment was observed in each structure (photographs 17-19). According to Mr. Kosloske, the stand pipe from Basin 5B had been removed from Basin 5B on October 12, 2016, and will be reinstalled October 14, 2016 (photograph 20). Sediment was observed at the outfall of Basin 5B (Outfall 5) and the outfall did not have rock outlet protection (photographs 21-24).

The area to the north of Basin 5B was cleared and is proposed green space once construction is complete. According to Mr. Kosloske, the area will be graded, covered with topsoil, and seeded. The area sloped to the east and the silt fencing along the east side of the property was full of sediment (photographs 25-31).

Outfall 4 is located north of the proposed green space. The outfall collects runoff from the north end of 161st Court and discharges into a culvert which then flows underground to a tributary of Walnut Creek. The silt fence had been removed at Outfall 4 to install the flared end of the outfall (photographs 32 and 33). I observed sediment that had discharged from Outfall 4 (photograph 34) and deposited in the culvert (photograph 35). According to Mr. Kosloske and Mr. Pezzetti, the culvert leads to a series of basins associated with a different construction site which agreed to accept discharge from Acadia Subdivision Plat 2. I did not observe these basins from the site or public access points. This description was not included in the SWPPP. The silt fence up gradient of the culvert was full of sediment (photograph 36 and 37). The stormwater inlets on 161st Court did not have inflow protection controls (photographs 38-40).

Outfall 3 is located on the northeast side of the property and drains Basin 3A. I observed accumulated sediments in Basin 3A (photographs 41-43). The stand pipe in Basin 3A had approximately six inches of solid riser and another six inches of perforated riser above the water surface (3 rows of 2-inch diameter holes) (photographs 44 and 45). The site SWPPP depicts the stand pipe in Basin 3A to be 24" above ground and a larger section of perforated risers (5 rows of 2-inch diameter holes). An erosion path into the basin was observed along the east side, creating an additional inflow point into the basin (photographs 48-50). Sediment was observed at Outfall 3 and the outfall did not have rock outlet protection (photographs 51 and 52). The silt fence upgradient to the west of Basin 3A was damaged (photograph 53). Other areas of the silt fence surrounding Basin 3A were full (photographs 54-56). Basin 3A collects drainage from Basin 3B as well as the west end of Oakwood Drive, 162nd Street, Goodman Drive, and the center section of 161st Court. The stormwater inlets on these roads did not have inflow protection controls.

The silt fence that ran along the northern side of the property was full and damaged in multiple locations (photographs 57-65). Outfall 2 drains Sharon Court and discharges to the north of the property approximately 100 feet into a tributary of Walnut Creek. Stormwater inlets on Sharon

Court did not have inflow protection controls (photographs 66-69) and the rock outfall protection had been covered in sediment (photograph 70).

Outfall 1 collects drainage from a swale that runs along the northwest side of the property (photograph 72) and discharges into a detention basin that was originally excavated for construction activities associated with Plat 1, which then discharges into a tributary of Walnut Creek. A cloudy grey/brown liquid substance was observed on the pavement along the west side of Oakwood Drive (photograph 73) as well as on a cleared area to south of the road (photograph 74). According to Mr. Kosloske, this was Boregel® used to install utility conduits below grade. Mr. Pezzetti said they typically let the Boregel® evaporate and/or to let the rain wash it away.

Basin 3B (photograph 75) collects drainage from a swale along the southwest side of the site (photographs 76 and 77). I observed concrete that had been washed out along the east side of the swale (photograph 77). The stand pipe was not installed in Basin 3B (photograph 78). The discharge from Basin 3B flows approximately 750 feet above ground through a vegetated area prior to discharging into Basin 3A (photograph 79). Two additional outlet structures flow into the vegetated area prior to discharging into Basin 3B; the first collects drainage from 162nd Street and the west side of Oakwood Drive (photograph 80) and the second collect drainage from the middle of 161st Court and the middle of Oakwood Drive (photograph 81). The silt fence was full where these two outlet structures converge (photograph 82). The inlet structure along these roads did not have inlet protection controls (photographs 84-90).

I drove by the site on October 12, 2016, and observed dirt that had been tracked offsite (photograph 92). I did not observe offsite tracking on October 13, 2016. According to Mr. Pezzetti, offsite tracking is managed with a skid loader. He was unaware of any street cleaning activities between October 12, 2016 and October 13, 2016,

FINDINGS AND OBSERVATIONS

Mr. Kosloske sent the site SWPPP dated March 21, 2016 to me via email. The SWPPP states accumulated sediments must be removed when they reach one half the height of the fence and that fences must be replaced when they are undermined. I observed multiple locations along the north, east, and central portions of the site where the silt fence was full of sediment, undermined, damaged, or missing. The erosion and sediment control plan states that a filter sock should be in place at Outfall 5. I did not observe a filter sock in this location. The SWPPP states that sewer drop-in intake devices will be installed once the intakes are installed and paving is complete. Inlet protection was not installed at the time of the inspection and temporary controls were not in place. The SWPPP also states that rock outlet protection should be installed all discharge points. Rock outlet protection was missing at two of the six discharge points. The SWPPP states that sediment basin stand pipes should not be removed until final stabilization is achieved and that accumulated sediments in basins will be removed on an as-needed basis. Three of four basin stand pipes had been removed and Basin 3A appeared to have excessive sediments. The SWPPP was not signed by the site owner or contractors and/or subcontractors working on the site as required by Part VI.G.

I sent an NOPV via email to Mr. Johnson on October 19, 2016, with the following listed as potential violations:

SWPPP implementation deficiencies:

- Accumulated sediment from silt fence was not removed and sections of silt fence that have been breached or undermined were not replaced.
- Filter socks were not installed at locations shown on the erosion and sediment control plan.
- Storm sewer inlet protection devices were not installed.
- Rock outlet protection was not installed at all outlets.
- Accumulated sediments from sediment basin number 3A were not removed.
- Stand pipes in three basins were removed from basins at the time of the inspection.

Additional deficiencies:

- Inspection reports were not provided for inspections once every seven calendar days as required by Part IV D.D.4. Reports for 10/6/16, 9/8/16, 8/25/16, 8/11/16 were provided.
- Building material wastes (Bore-Gel®) was not being disposed of properly as required by Part IV.D.2.C.
- The SWPPP was not signed as required by Part VI.G.
- Contractors and/or subcontractors working on the site were not identified in and did not sign the SWPPP as required by Part IV D.D.7.

I received an email from Mr. Kosloske on October 14, 2016, (October 14 email) which stated Pezzetti Soil Erosion Control, Inc. began placing new controls in some of the areas where controls were identified as missing, damaged, or ineffective during the October 13, 2016, inspection. The stand pipes for Basins 6, 5B, and 3B were reinstalled. Below grade baskets were installed in street storm intakes.

I received a letter from Mr. Pezzetti dated October 26, 2016 responding to the NOPV (Attachment 7). Weekly inspection reports were provided beginning August 4, 2016. Inspection reports preceding August 4, 2016, have not been provided. Inspection reports make generalized statements such as “number of controls need repair” or “majority of controls in place”, or “multiple control failures” and do not identify specific controls that are in need of repair (i.e., the location, control type, etc.). Photos are provided in inspections reports, but do not include descriptions. Corrective actions pertaining to cleaning up empty grease tubes was identified in four consecutive inspection reports and some storm drain inlets required adjustment in three consecutive inspection reports.

The October 26 letter also states that Pezzetti Erosion Control was waiting until October 13, 2016, until McAninch Corporation finished grading and re-spreading topsoil before fixing and replacing controls identified during the September 29, 2016, inspection. It is unclear which controls were replaced during this time. Weekly inspection reports state controls need repairs and replacement once conditions dry up since the September 1, 2016 inspection. The October 26 letter provides photos of repaired silt fence and filter socks that were placed on October 13-14,

2016 after the inspection. The letter also states rock outlet protection was not installed at two outfalls because areas still needed final grading and that additional sediment was removed from Basin 3A.

The safety data sheet was provided for Tru-Bore[®], which was originally thought to be BoreGel[®] at the time of the inspection. The letter explains that Tru-Bore[®] is not a hazardous waste and is therefore left to evaporate.

The signed owner certification statement as well as signed contractor/subcontractor certification statements were provided.

CONCLUSION/RECOMMENDATIONS

- 1) Silt fencing in areas that are compromised and/or full of sediment should be replaced and maintained;
- 2) Adequate basin capacity should be maintained by continuously removing accumulated sediments;
- 3) Standpipes should be kept in basin outlets until final site stabilization is achieved per SWPPP;
- 4) Specific findings during weekly inspections should be documented. Corrective actions should be verified and documented;
- 5) Offsite sediment runoff should be eliminated from Outfall 4 and Outfall 5;
- 6) Inlet protection should be installed as storm sewers are installed;
- 7) The concrete wash out bin should be used for all concrete wash out activities;
- 8) Chemicals that contribute to a non-stormwater discharges such as Tru-Bore[®] should be cleaned up;
- 9) The SWPPP should be updated to properly reflect Outfall 4 discharge.

DISCUSSION

According to Mr. Kosloske and Mr. Pezzetti, Outfall 4 leads to a series of basins associated with a different construction site which agreed to accept discharge from Acadia Subdivision Plat 2. I did not observe these basins from the site or public access points and this description did not reflect what was written in the SWPPP. I requested to be sent a figure depicting the basins as well as the agreement between Acadia Subdivision Plat 2 and the neighboring construction site to use the ponds via email on October 21, 2016. I have not received a response.



Erin F. Trainor
Environmental Engineer
Date: November 9, 2016

Attachments:

1. Stream Characteristics and Water Nexus Form (7 pages)
2. Photographs (100 pages)
3. Stormwater Pollution Prevention Plan (121 pages)
4. Pezzetti Erosion Control Inc. Inspection Reports: 10/6/16, 9/8/16, 8/25/16, 8/11/16 (35 pages)
5. October 14, 2016 Follow-up Letter (8 pages)
6. NOPV (2 pages)
7. NOPV Response (128 pages)

ATTACHMENT 1

Stream Characteristics and Water Nexus
NPDES Inspections

April 10, 2007

Stream at Discharge from Site

Location: NE side of Property

GPS

Latitude: 41°39'00.13"N

Longitude: 93°50'14.64"W

Channel Width (1): 20'

Bank Depth (2): 10'

Substrate Type (3): vegetated

Avg. Water Depth: 0'

Visible Flow? ☐ Yes ☒ No

Sediment from site? ☐ Yes ☒ No

Dimensions (5): 20' x 10' ^{Grass} Swale

Site Characteristics

Bank vegetative Cover (4): 100 %

Type of cover:

☒ Grass ☒ Weeds ☒ Woods

Photographs: 20' x #1

Culvert Size: 20' x 10'

Footnotes and additional notes are on
the second page.

Stream at Downstream of discharge

Location: NE side Intersection of
Brookview Dr. and 156th St

GPS

Latitude: 41°39'06.53"N

Longitude: 93°50'01.01"W

Channel Width (1): 30'

Bank Depth (2): 8'

Substrate Type (3): Sand

Avg. Water Depth: 1'

Visible Flow? ☒ Yes ☐ No

Sediment from site? ☐ Yes ☒ No

Dimensions(5): 30' x 8'

Site Characteristics

Bank vegetative Cover (4): 50 %

Type of cover:

☐ Grass ☐ Weeds ☐ Woods

Photographs: #2

Culvert Size: 30' x 8'

Nexus: perennial stream

Location: NE side Brookview Dr

GPS

Latitude: 41°59'09.31"N

Longitude: 93°50'11.11"W

Channel Width (1): 4'

Bank Depth (2): 4'

Substrate Type (3): vegetated

Avg. Water Depth: 4-6"

Visible Flow? ☒ Yes ☐ No

Sediment from site? ☐ Yes ☒ No

Dimensions(5): 4' x 4'

Site Characteristics

Bank vegetative Cover (4): 100 %

Type of cover:

☒ Grass ☒ Weeds ☐ Woods

Photographs: #3 and #4

Culvert Size: 4' x 4'

Distance to site: ~ 100'

- (1) Model input of Channel Width: Distance from the top of one bank to the top of the other bank.
- (2) Model input of bank depth: Distance from top of bank to bottom of stream.
- (3) Model input of Substrate type:
 - a. **Fine silt/sand:** gritty, no rocks
 - b. **Gravel:** lady bug-sized to marble-sized rocks
 - c. **Coarse Gravel:** Marble-sized to Tennis ball
 - d. **Cobble:** Tennis ball to basketball
 - e. **Boulder:** Larger than basketball
- (4) Model input of Vegetative Cover in percent coverage of the upper banks, check the appropriate type listed.
- (5) Estimate of sediment in the stream or off-site. Measurements in three dimensions would be best.

Additional Site Notes:

*Swale leads to stand up pipe - no flow
Clean ditches in swale
Large clearing at end of swale*

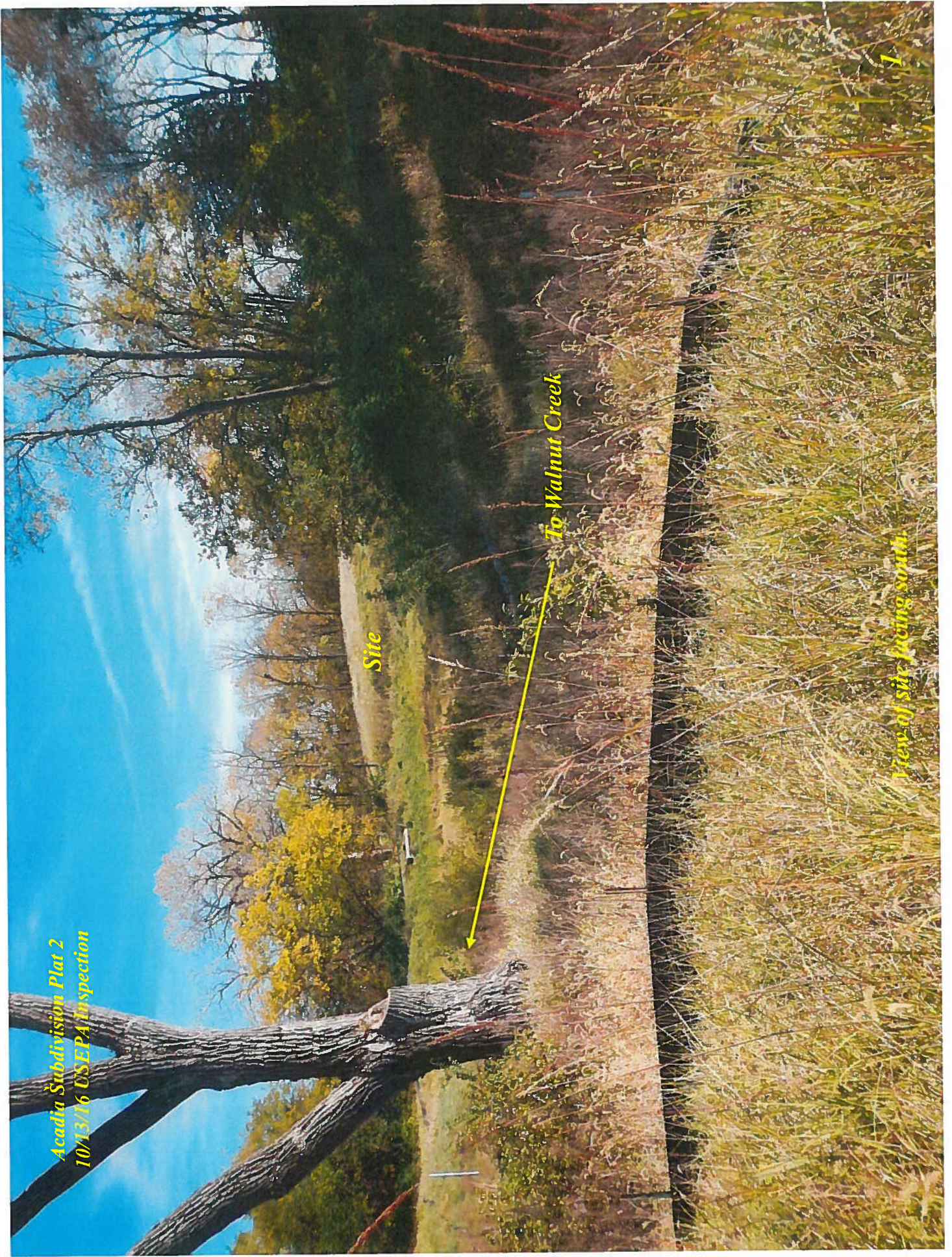
Acadia Subdivision Plat 2
10/13/16 USEPA Inspection

Site

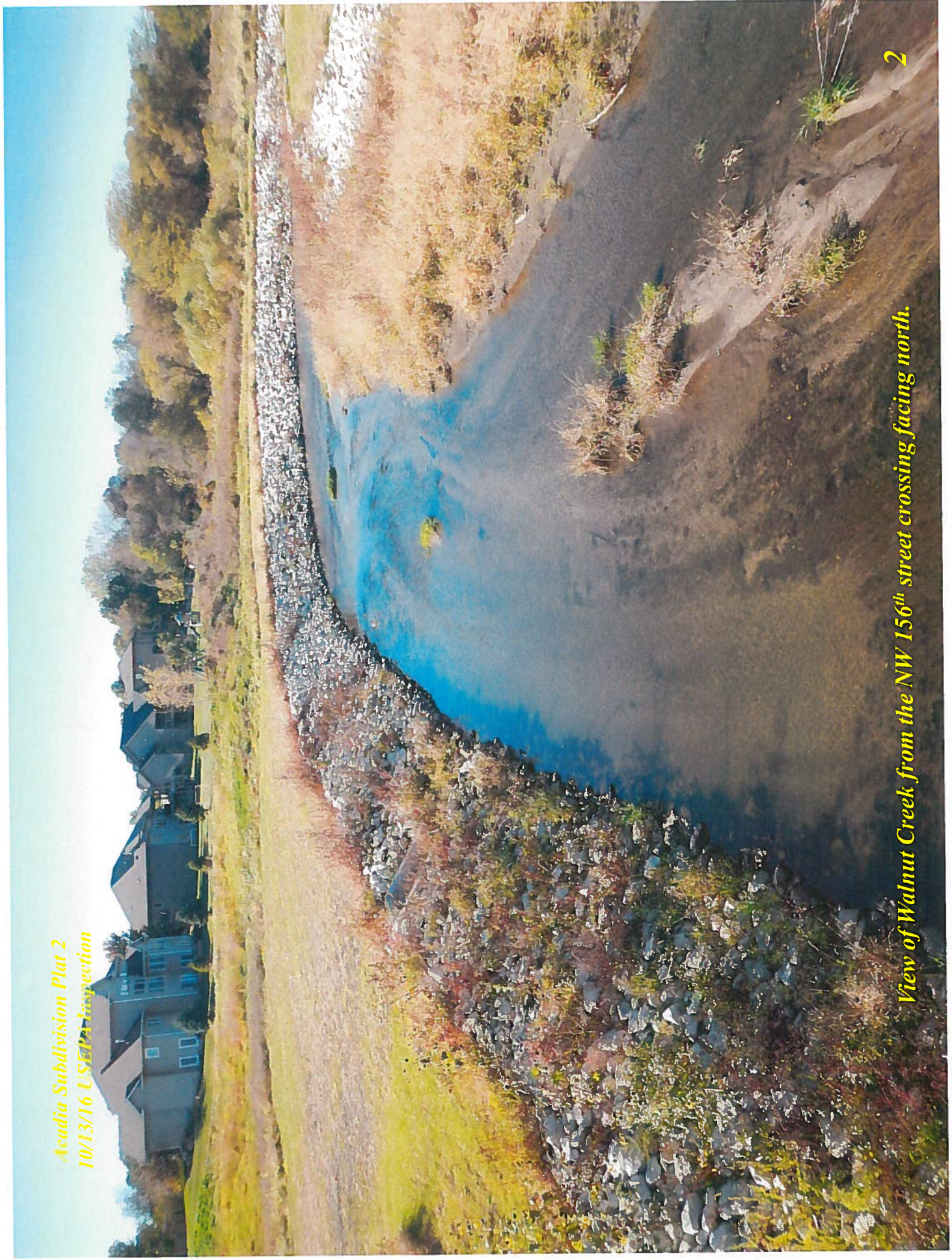
To Walnut Creek

View of site facing south

1



*Acadia Subdivision Plat 2
10/13/16 USEPA Inspection*



View of Walnut Creek from the NW 156th street crossing facing north.

Acadia Subdivision Plat 2
10/13/16 USEPA Inspection

View of tributary from site to Walnut Creek facing west.

3



*Acadia Subdivision Plat 2
10/13/16 USEPA Inspection*



View of tributary from site to Walnut Creek facing east.